



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/550,420	04/17/2000	Karen L. Harrison	BLD9-2000-0004US	1529

7590 04/15/2005

DAVID W LYNCH  
CRAWFORD MAUNU PLLC  
1270 NORTHLAND DRIVE  
SUITE 390  
MENDOTA HEIGHTS, MN 55120

EXAMINER

SHAH, NILESH R

ART UNIT PAPER NUMBER

2195

DATE MAILED: 04/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/550,420

Applicant(s)

HARRISON ET AL.

Examiner

Nilesh Shah

Art Unit

2195

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 22 March 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-37 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-37 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

**DETAILED ACTION**

1. Claims 1-37 are presented for examination.

***Response to Arguments***

2. In view of the appeal brief filed on 11/17/04, PROSECUTION IS HEREBY REOPENED. New grounds of rejection are set forth below.
3. To avoid abandonment of the application, appellant must exercise one of the following two options:
  - a. file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,
  - b. request reinstatement of the appeal.
4. If reinstatement of the appeal is requested, such request must be accompanied by a supplemental appeal brief, but no new amendments, affidavits (37 CFR 1.130, 1.131 or 1.132) or other evidence are permitted. See 37 CFR 1.193(b)(2).

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - a. A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated

by the manner in which the invention was made.

6. Claims 1-21 are rejected under 35 U.S.C. 103(e) as being unpatentable over Harkins et al (5,513,126).
7. As per claim 1, Harkins teaches the invention substantially as claimed a method for dictating the order that print jobs received over multiple channels are printed, comprising assigning priority values to channels that receive print jobs (abstract; col. 8 lines 50-54; col.9 line 62- col. 10 line 15); associating the priority value assigned to the data channel with the print jobs received at its respective channel (col. 10 lines 30-35; col. 8 lines 50-54; col.9 line 62- col. 10 line 15); and printing the print jobs in an order corresponding to their associated priority values(col. 8 lines 50-54; col.9 line 62- col. 10 line 15).
8. It should be noted that what is claimed and what is disclosed in Harkins differs only in the sense that in the claimed invention, print jobs are transferred over a data channel while in Harkins print jobs are transferred over a network channel. In either case, data is being transferred over a communications system, and the form or function of that data is immaterial to what the scope of the invention is. Therefore, it would have been obvious to one of ordinary skill in the art to substitute the method of transmitting print jobs on a network channel as in Harkins for records or any other type of data that is to be transmitted over a communications network. The discrepancy in type of data is immaterial, and the scopes of the inventions are essentially equivalent.

9. As per claim 2, Harkins teaches a method wherein assigning a priority value comprises assigning a different priority value to each data channel that receives the print jobs (col. 14 lines 29 – 50).
10. As per claim 3, Harkins teaches a method wherein assigning a priority value comprises assigning two or more of the data channels equal priority values, and wherein printing the print jobs comprises printing the print jobs received via the two or more data channels having equal priority values in an order in which they were received via the data channels (col. 16 lines 25-50; col. 8 lines 50-54; col.9 line 62- col. 10 line 15).
11. As per claim 4 Harkins teaches a method wherein printing the print jobs in an order corresponding to their associated priority values comprises printing the print jobs in an order from highest priority to lowest priority (col. 16 lines 35-40).
12. As per claim 5, Harkins teaches a method wherein at least one of the data channels is dedicated as an internal print data channel to receive internally generated print jobs (col. 16 lines 41-49).
13. As per claim 6, Harkins teaches a method wherein assigning the priority value to the data channel that receives print jobs comprises assigning the internal print data channel the highest possible priority (col. 16 line 41-49).

14. As per claim 7, Harkins teaches a method wherein assigning the priority value to the data channel comprises assigning a priority value to each of the data channels that receives a different predefined group of print job types (col. 16 lines 25-50; col. 8 lines 50-54; col.9 line 62- col. 10 line 15).
15. As per claim 8, Harkins teaches a method further comprising:  
determining whether a plurality of the print jobs currently pending have equivalent associated priority values (col. 16 lines 25-50; col. 8 lines 50-54; col.9 line 62- col. 10 line 15); and  
printing the print jobs that have the equivalent associated priority values in an order in which they were received via their respective data channels (col. 16 lines 25-50).
16. As per claim 9, Harkins teaches a method further comprising determining the order in which the print jobs having equivalent associated priority values were received by monitoring time of arrival of the print jobs (col. 13 lines 32-66).
17. As per claim 10, Harkins a method further comprising determining the order in which the print jobs having equivalent associated priority values were received by queuing the print jobs having equivalent associated priority values in a first in first out arrangement (col. 16 lines 36-50).

18. As per claim 11, Harkins teaches a method of further comprising queuing the print jobs in a increasing order according to their respective priority values, and forwarding the print jobs to a print engine for printing in the order in which the print jobs are queued (col. 16 lines 36-50).
19. As per claim 12, Harkins teaches a method further comprising queuing the print jobs in an order of receipt of the print jobs, and sending the print jobs to a print engine for printing in a sequential order corresponding to the respective priority values associated with the print jobs (col. 16 lines 25-50; col. 8 lines 50-54; col.9 line 62- col. 10 line 15).
20. As per claim 13, Harkins teaches a method wherein assigning the priority value comprises assigning the priority value upon initialization of a printing device designated for printing the print jobs (col. 8 lines 50-54; col.9 line 62- col. 10 line 15).
21. As per claim 14, Harkins teaches method wherein assigning the priority value comprises assigning the priority value via a user interface by a user granted authority to reassign the priority values to selected ones of the data channels (col. 8 lines 50-54; col.9 line 62- col. 10 line 15).
22. Claim 15 is rejected based on the same rejection as claim 1 above.

23. As per claim 16, Harkins teaches a printing device coupled to receive print jobs transmitted by one or more computing devices, the printing device comprising:  
a plurality of data channels to receive the print jobs, wherein the data channels are assigned respective priority values (abstract; col. 8 lines 50-54; col. 9 line 62- col. 10 line 15);  
wherein the print jobs received at the data channels assumes the priority value of its respective one of the data channels a compare module coupled to receive the priority values corresponding the received print jobs and to identify the print job exhibiting the highest priority (col. 16 lines 36-50); and  
a print engine to print the print jobs in an order from the highest priority to the lowest priority as identified by the compare module (col. 8 lines 50-54; col. 9 line 62- col. 10 line 15).
24. As per claim 17, Harkins teaches a printing device further comprising one or more print queues coupled to receive and output the print jobs in an order received wherein the print jobs are received in the order of the highest priority to the lowest priority (col. 16 lines 25-50; col. 8 lines 50-54; col. 9 line 62- col. 10 line 15).
25. As per claim 18, Harkins teaches a printing device further comprising one or more print queues coupled to receive the print jobs in an order received, and to output the print jobs in an order corresponding to their respective priority values (col. 16 lines 36-50).



26. As per claim 19, Harkins teaches a printing device further comprising a job monitor module coupled to the plurality of data channels to receive and store the priority values associated with the print jobs that are currently pending (col. 10 lines 30-35).
27. As per claim 20, Harkins teaches a printing device wherein the compare module is coupled to the job monitor module to receive the stored priority values, and to identify the print job exhibiting the highest priority in response thereto (col. 16 lines 25-50; col. 8 lines 50-54; col.9 line 62- col. 10 line 15).
28. As per claim 21, Harkins teaches a printing device wherein the plurality of data channels comprise an internal print data channel in which internally generated print jobs are received (col. 8 lines 50-54; col.9 line 62- col. 10 line 15).
29. As per claim 22, Harkins teaches a printing device wherein the internal print data channel is preassigned to the highest priority in a range of the priority values (col. 10 lines 30-35).
30. As per claim 23, Harkins teaches a printing device further comprising a user interface coupled to the internal print data channel to allow a user to select print features to initiate the internally generated print jobs (col. 11 lines 1-16; col. 13 lines 56-60).

31. As per claim 24, Harkins teaches a printing device further comprising an internal print module to generate the internally generated print jobs corresponding to the selected print features (col. 13 lines 56-60).
32. As per claim 25, Harkins teaches a printing device wherein the priority of the print job is inversely proportional to the priority value associated with the print job (col. 10 lines 30-35; col. 8 lines 50-54; col.9 line 62- col. 10 line 15).
33. Claim 26 is rejected based on the same rejection as claim 15 and 16 above.
34. As per claim 27, Harkins teaches a printing system wherein each of the data channels is assigned a different priority value (col. 8 lines 50-54; col.9 line 62- col. 10 line 15).
35. As per claim 28, Harkins teaches a printing system wherein each of the data channels corresponds to a predefined group of print job types (col. 13 lines 56-60).
36. Claim 29 is rejected based on the same rejection as claim 1 and 16 above.
37. As per claim 30, Harkins teaches a method wherein printing the print jobs in a sequence comprises printing the print jobs in a sequence of highest priority to lowest priority (col. 16 lines 25-50; col. 8 lines 50-54; col.9 line 62- col. 10 line 15).

38. As per claim 31, Harkins teaches a method further comprising:  
  
designating one of the data channels as an internal print data channel to receive internally generated print jobs(col. 8 lines 50-54; col.9 line 62- col. 10 line 15);and  
  
pre-assigning a priority value to the internal print data channel that represents the highest possible priority value of a priority value range of priority values(col. 13 lines 56-60).
39. As per claim 32, Harkins teaches a method wherein assigning the priority values to the data channels comprises assigning the priority values upon initialization of the printing device in accordance with a predetermined priority assignment (col. 16 lines 35-40).
40. As per claim 33, Harkins teaches a method wherein assigning the priority values to the data channels comprises assigning the priority values via a user interface to apply user selected priorities to particular ones of the data channels (col. 10 lines 11-15).
41. As per claim 34, Harkins teaches a method wherein determining relative priorities of the print jobs comprises comparing the priority values of the print jobs that are currently pending to each other (col. 8 lines 50-54; col.9 line 62- col. 10 line 15).
42. Claim 35 is rejected based on the same rejection as claim 16 above.
43. Claim 36 is rejected based on the same rejection as claims 1 and 16 above.
44. Claim 37 is rejected based on the same rejection as claim 30 above.

Art Unit: 2195

***Conclusion***

45. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nilesh Shah whose telephone number is (571)272-3771. The examiner can normally be reached on 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng An can be reached on (571)272-3756. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Nilesh Shah  
Examiner  
Art Unit 2195

NS  
April 6, 2005

  
MAJID BANANKHAH  
PRIMARY EXAMINER